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ABSTRACT

An impact analysis of the Vocational Opinion Index Transition System (VOITS) was conducted by studying the first six months of its implementation at a Minneapolis vocational training center. (The VOITS program provides skills training personnel with an early diagnosis of an individual's "Job Readiness Posture" and guidelines for the development and implementation of ameliorative activities which result in the modification of nonworker postures.) The participants in the study were placed at random into two groups: One group received only the vocational skills training and the other group received both the vocational training and the VOITS training. A before and after training measure of the "Job Readiness Posture" was given each group. After comparison, the results showed that the VOITS program significantly increases the number of trainees who obtain and maintain jobs upon completion of their vocational training. The study also revealed that VOITS can be successfully implemented in training institutions without additional personnel or capital equipment and that the system is cost effective, yielding a benefit of 17 times the cost of implementation for two years in the Minneapolis study. (A brief description of the implementation process is included.) (BM)

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INCREASING EMPLOYABILITY:

THE UTILITY OF THE
VOCATIONAL OPINION INDEX TRANSITION SYSTEM

November, 1975

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This report is solely the responsibility of the authors and is not meant to infer approval of the Center, the U.S. Office of Education who funded the development and implementation of the VOITS, or the Department of Labor who funded the initial research. The findings and conclusions are based on the data presently available and are subject to update as more data are collected.

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EXECUTIVE SUMMARY

The Vocational Opinion Index Transition System (VOITS) was developed to help vocational skills training personnel increase the number of trainees who obtain and maintain jobs after leaving their program. The data presented in this report shows that the VOITS has been remarkably effective and efficient in increasing the number of trainees transitioning to long-term, unsubsidized employment.

Specifically, the results of the first six months of implementation of the VOITS at Minneapolis show that:

- . VOITS can be successfully implemented in training institutions without additional personnel or capital equipment.
- . The VOITS significantly increases the number of trainees who obtain and maintain jobs upon completion of their vocational training.
- . The benefit cost analysis yields a benefit after only six months of operation which is greater than 17 times the cost of implementation for two years. The anticipated benefits for the next 18 months would further contribute to the impressive benefit cost ratio.

INTRODUCTION

The Vocational Opinion Index Transition System was developed during a series of studies dedicated to helping individuals become workers. The initial study in the series was funded by the U.S. Department of Labor (OMPER). The subsequent studies have been funded by the U.S. Office of Education (MDT).

The Vocational Opinion Index Transition System (VOITS) provides skills training personnel with an early diagnosis of an individual's Job Readiness Posture (JRP) and guidelines for the development and implementation of ameliorative activities which result in the modification of non-worker postures. The improvement of an individual's JRP increases the probability of a person's being able to obtain and maintain a job after leaving a skills training program.

The development of the VOITS was based on a theory of Transition to Work (Benson and Whittington, 1973; Whittington and Benson, 1974) which states that successful transition from an unemployed or underemployed state to a fully employed state requires the existence of three conditions:

- . There must be a viable job opportunity, i.e., there must be openings in the labor market
- . The individual applying for the job must have the requisite technical skills demanded by the job
- . The individual applying for the job must have the requisite Job Readiness Posture skills demanded by the job

Prior to the Transition to Work research, a number of research and development efforts had been directed toward the measurement and improvement of the skill acquisition and

placement (i.e., job availability) components of the Transition process. However, until the development of the Vocational Opinion Index (VOI), the paper and pencil instrument used by VOITS to provide the diagnosis of an individual's JRP, trainers lacked effective techniques for measuring and improving a trainee's JRP skills. Thus, the VOI provides an instrument for measuring the Job Readiness Posture component of Transition and the VOITS provides a mechanism for improving an individual's JRP skills.

This report presents the results of the first six months of implementation of the VOITS at one skills training center. It is not intended to provide the reader with an in-depth description of VOITS, but rather to provide an understanding of the positive impact that the VOITS can have on the effectiveness of a skills center in placing trainees on long-term, unsubsidized jobs.

Minneapolis was selected as the site for the impact analysis because it was the only site of the four sites involved in the pilot VOITS training that did not go through a difficult transition from MDTA to CETA. In each of the other sites, there were such significant changes in staff, staffing structure, and trainees that it would have been impossible to conduct a valid study of impact.

The data presented in the following pages clearly indicate that the implementation of VOITS in a well-run training program can significantly increase the productivity of the center when productivity is measured as the percentage of trainees transitioning to long-term, unsubsidized employment.

IMPLEMENTATION OF THE VOITS

The VOITS is more than a paper and pencil instrument. It is an individualized approach to overcoming non-worker JRP problems which has been developed for skills training programs. The VOITS is a flexible system which adapts to the total training environment in which it is to be implemented, e.g., the labor market, the staff, the available ancillary services, and the types of clients. As a result, no two VOITS implementations are identical. Each VOITS is adapted to utilize the local resources available and to inculcate any local JRP skills that may be necessary.

However, the process of training a group of individuals to implement VOITS is the same at all sites. This process is outlined in the following paragraphs.

Step 1. General Staff Briefing

The entire staff is briefed on the VOITS' philosophy and given an explanation of the implementation process. They are alerted to types of changes that may be required and the types and levels of involvement that will be expected of those who participate in the VOITS. In no case has an entire program staff been trained simultaneously. A group of 2 to 4 teams is trained initially and once they have the VOITS up and running smoothly, they train additional staff members.

Step 2. Selection of the Staff Members for Training

There are three major components of a training system that impact on a client after intake: skills training, counseling, and job placement. Each of these components has a role in VOITS. The staff member or members who are responsible for providing each of these services to a client act as a member of that client's facilitative team. The facilitative team is the "prime mover" in the implementation of the VOITS.

The process of selecting the initial teams for VOITS training should involve both the staff members and the administrators. The initial teams should:

- . Be complete teams, i.e., have counseling, training, and job placement represented. Teams may also include additional members such as basic skills instructor and intake worker.
- . Consist only of individuals who are interested in VOITS and willing to expend some additional time and effort to start VOITS in motion
- . Consist only of individuals who can work together effectively
- . Represent a diverse selection of vocational skill areas

Step 3. Training of Facilitative Teams

Training the facilitative teams usually requires three training sessions spaced approximately six weeks apart.

The first training session lasts approximately two and one-half days. During this session the facilitative teams develop a thorough understanding of:

- . The Transition concept
- . Job Readiness Posture and how it is measured
- . The Vocational Opinion Index and its administration
- . The generation and interpretation of the VOI Areas of Concern
- . The generation and implementation of ameliorative training activities designed to help trainees develop JRP skills
- . VOITS recordkeeping
- . The structuring and functioning of facilitative teams

Prior to the initial training session, VOIs are administered to all the trainees. The VOIs are scored and the JRP problem areas for each individual are recorded on Areas of Concern sheets. These are available for the first training session. During the training session, the facilitative teams will work with the "real data" for trainees they know. This permits the teams to develop confidence in the VOI results by testing the VOI data against the "experience" data they have collected by dealing with the trainees who have been enrolled for a period of time. Once the teams understand the Areas of Concern provided by the VOI, they develop plans for teaching those JRP skills indicated as needed by the individual Areas of Concern. The teams also develop feedback mechanisms to determine if the plans are working. By the end of the first training session the teams have developed a number of activities for helping trainees develop worker JRPs, as well as ways of determining if the activities are working.

The second training session requires one to two days. At this session the teams brief the trainers on VOITS activity and specifically explain the problems they have encountered. The goals of this session are to sharpen the teams' skills in using the VOITS and to smooth out any systems problems.

The third session, if required, is on request of the teams. Normally this session takes one-half of a day and focuses on solving specific systems problems such as the record keeping system and addressing specific problem cases.

Once the VOITS is up and running at a center and the teams are comfortable with the system, one team can usually handle a caseload of approximately 20 people (assuming an open entry - open exit system) in a single one hour meeting each week. At this meeting, the team discusses the Areas of Concern for the new trainees and establishes a program for dealing with the Areas of Concern. They also review the progress of trainees who are already participating in VOITS and update the individualized programs as necessary.

Step 4. Expansion of VOITS Within A Center

Once the initial facilitative teams have the VOITS up and running, other staff members within the center usually begin to request to participate. The initial teams are fully capable of training additional facilitative teams as they are formed. Thus, the initial group of 2 to 4 teams are able to accomplish both the expansion of VOITS throughout a center and the sustaining of the system as new staff members are hired.

IMPLEMENTATION OF VOITS AT MINNEAPOLIS

The Vocational Opinion Index Transition System (VOITS) has been up and running at the Minneapolis Occupational Skills Training Center for over a year. Minneapolis was one of the first centers that Associates trained to use the VOITS.

At Minneapolis the VOITS was initially implemented with three facilitative teams in three skills areas: Auto Mechanics, Clerks and Clerk-Typists, and Power Machine Operator. The initial VOITS teams had volunteered to participate in the implementation. Each team consisted of at least one skill instructor (the clerical team consisted of two instructors) and the same counselor worked with all three teams. Initially, the teams also included an Employment Service Job Developer, but due to political circumstances unrelated to VOITS, he was transferred to another location. His position in the VOITS team was not filled because the team's implementation of VOITS was well underway and adding a new person to the team would have significantly slowed progress. Instead, the instructors assumed the responsibility of the Job Developer. Though this situation is not ideal, the VOITS was still exceptionally effective in addressing JRP Areas of Concern.

The initial cadre of facilitative teams has been operating for about a year. During this year they have trained new center personnel and additional facilitative teams. Though the center director has never pushed a center-wide implementation of VOITS, the system appears to be gradually expanding toward center-wide implementation.

Reports from the facilitative teams, the center administrator, and outside agencies which purchased slots at the skills center are extremely positive. The teams report that the VOITS allows them to utilize their time more efficiently and effectively. The staff spends less time solving crises and more time handling potential problem situations before they reach crisis proportion.

This seems to be especially true for the counselors. The administrator reports that all the teams wanted to continue to use the VOITS. Even outside agencies, such as the CEP, have reported an increased level of job readiness among their clients who were VOITS participants.

Analysis of the VOITS clients records at the skills center indicates that VOITS clients do not require additional training time when compared to non-VOITS clients but VOITS clients do leave the program with additional skills, i.e, job readiness skills.

IMPACT OF THE VOITS AT MINNEAPOLIS

Study Design

The study design for the impact analysis required two groups of individuals:

- . A group that participated in VOITS training in addition to vocational skills training (VOITS group)
- . A group that participated only in vocational skills training (non-VOITS group)

Individuals were assigned to one of the two groups by the skills center on a random basis.

The VOITS and non-VOITS lists were kept by the center until the follow-up VOIs had been returned to Associates by the trainees. Once Associates had received a follow-up VOI, the name was sent to the center and the person's involvement in VOITS was reported. This system minimized any potential bias in the analysis.

The vocational training for VOITS and non-VOITS trainees was identical in terms of length of training, level of skills mastery required, available vocational skills training materials, and total ancillary services available.

The impact analysis included a before training and an after training measure of the Job Readiness Posture. The VOI was used to measure an individual's JRP. The impact analysis also included a measure of actual work behavior of individuals after they left training.

The basic impact question is "Does VOITS involvement increase the probability of someone being able to get and hold a job?"

Representativeness of Sample

The following analyses will show that the VOITS group and the non-VOITS group were not statistically different on entry into the program, and that the inclusion of VOITS into the skills training program had a positive impact on the percentage of people who were able to get and hold jobs upon leaving the skills center.

Table 1 shows the percentage of individuals in the VOITS and non-VOITS groups who had worker and non-worker postures as measured by the VOI on entry into the Minneapolis program. There is no significant difference between the two groups. Assuming that all other conditions within the center remained constant for the two groups, it is possible to infer that if POST program differences do exist between the two groups that these differences are due to VOITS intervention.

Table 2 shows the same data for the nationwide implementation of VOITS. These data are not significantly different from the Minneapolis data. Thus, the distribution of pre-program Job Readiness Postures of trainees at Minneapolis is in fact representative of that across the country.

Impact of VOITS on Number of Individuals Getting and Holding a Job

Table 3 shows the behavioral work status of the VOITS and non-VOITS group approximately 13 weeks after they left the Minneapolis Occupational Skills Training Center. These results are significantly different at the 0.05 level of significance. More clients who participated in VOITS got and held jobs than did the clients who did not have the benefit of VOITS.

TABLE 1 -- WORKER AND NON-WORKER POSTURES OF VOITS AND
NON-VOITS INDIVIDUALS AS MEASURED BY VOI ON
ENTRY INTO MINNEAPOLIS PROGRAM

	Entry VOI	
	WORKER	NON-WORKER
VOITS	62%	38%
NON-VOITS	61%	39%

TABLE 2 -- WORKER AND NON-WORKER POSTURES OF VOITS AND
NON-VOITS INDIVIDUALS AS MEASURED BY VOI ON
ENTRY INTO PROGRAM OF NATIONWIDE SAMPLE

	<u>Entry VOI</u>	
	WORKER	NON-WORKER
VOITS	62%	38%
NON-VOITS	65%	35%

TABLE 3 -- BEHAVIORAL WORK STATUS OF VOITS AND NON-VOITS
GROUPS 13 WEEKS AFTER LEAVING THE PROGRAM

N = 132

	13-Week Behavioral Work Status	
	WORKER	NON-WORKER
VOITS	88%	12%
NON-VOITS	73%	27%

Table 4 shows the overall impact of the VOITS implementation. The left hand side of the table indicates that there are no significant differences in behavioral work status between the VOITS and non-VOITS groups for those individuals who entered the training program with a worker Job Readiness Posture. This means that the VOITS does not increase the number of people with good Job Readiness Postures at entry who get and hold a job. Likewise, it does not negatively impact on those individuals who have a good Job Readiness Posture at entry into the program. The data indicates that 90 percent of the individuals who enter a skills training program with a worker posture will get and hold a job regardless of VOITS or non-VOITS participation.

The right hand side of the table shows what happens to those individuals who enter a skills training program with a non-worker Job Readiness Posture. Here there is a significant difference in the percentage of each group who are able to get and hold a job once they leave the training program. The percentage of VOITS participants who had non-worker postures on entry but were able to get and hold a job is almost double that of the non-VOITS group who had non-worker postures. Furthermore, four times as many non-VOITS participants with non-worker postures at entry are not able to get and hold jobs when compared to VOITS participants with non-worker postures at entry.

It is interesting to note that the percentage of individuals with non-worker postures at entry who were in the VOITS group who got and held jobs is not significantly different than the percentage of individuals with worker postures who got and held jobs on the left hand side of the table. This means that a person entering a VOITS program with a non-worker JRP is just as likely to get and hold a job as is a person with a worker JRP entering the same program. This suggests that the VOITS system is efficient in helping individuals with non-worker postures get and hold jobs. Another fact that might attest to the effectiveness of the VOITS is that at the time of this

TABLE 4 -- IMPACT TABLE

N = 132

	Actual Work Status	Entry VOI Attitude			
		Worker		Non-Worker	
		WORKER	NON-WORKER	WORKER	NON-WORKER
VOITS		87%	13%	90%	10%
NON-VOITS		91%	9%	47%	53%

study the national unemployment rate was approximately 10 percent. Thus, it is not surprising that:

- . Thirteen percent of the VOITS group with worker postures at entry did not get and hold jobs
- . Nine percent of the non-VOITS group with worker postures at entry did not get and hold jobs
- . Ten percent of the VOITS group with non-worker postures at entry did not get and hold jobs

The preceding analyses have shown that the VOITS does have a significant positive impact on the number of individuals in a training program who get and hold jobs upon completion of the program.

BENEFIT COST ANALYSIS FOR VOITS IMPLEMENTATION

Since the VOITS has a strong positive impact on a training system, a second question should be addressed: "Is implementation of VOITS cost beneficial?"

The analysis presented in Table 5 is a simple benefit-cost analysis of VOITS implementation. The analysis uses only actual skills center costs and benefits. Additional benefits such as taxes paid by workers, reduction in welfare grants, or psychological benefits to workers were not included in the analysis. An inclusion of these benefits would enhance the benefit side of the equation.

Table 5 indicates that it costs approximately \$4864 to enroll a trainee in the Minneapolis program for six months. Table 4 indicates that 47 percent of the 40 individuals entering the program with non-worker JRPs, i.e., 18 individuals, could be expected to get and hold jobs; 16 more students than expected actually developed worker postures and got and held jobs. The costs for the 16 students who had non-worker JRPs on entry into the program but who got and held jobs on leaving the program were well-spent because of the VOITS program. Therefore, the net benefit of VOITS was $16 \times \$4864 = \$74,944$. The cost for training, implementing and operating the VOITS in an average center for two years is \$4000. Thus, the benefit cost ratio for Minneapolis is impressive. The savings shown in Minneapolis for the first six months of operation using the figures stated above is in excess of \$70,000.

TABLE 5 -- BENEFIT COST ANALYSIS FOR VOITS IN MINNEAPOLIS

Total VOITS participants (first six months)	94
Total VOITS participants who had worker JRPs at entry	<u>54</u>
Total VOITS participants who had non-worker JRPs at entry	40

Therefore, 40 VOITS participants needed to develop worker postures in order to obtain and maintain a job. Table 4 indicates that 47 percent of the individuals with non-worker postures at entry into a non-VOITS program got and held jobs. Therefore, 47 percent of the 40 individuals or 18 individuals could be expected to get and hold jobs. Thirty-four (34) of the VOITS participants actually developed worker postures and got and held jobs. This is 16 more than could be expected.

Average cost of training at Minneapolis per trainee	\$ 2,500
Average cost of training stipend for 26 weeks	<u>2,184</u>
Cost of training at Minneapolis per person	4,684
Net benefit to date of VOITS in Minneapolis (based on training costs not wasted) 16 persons x \$4684 per person	74,944
Cost for first two years of VOITS (includes VOITS training, VOI scoring, technical assistance, etc.)	<u>4,000</u>
SAVINGS IN FIRST SIX MONTHS OF OPERATION	\$70,944

SUMMARY

The results of the first six months of implementation of the VOITS at Minneapolis show that:

- . VOITS can be successfully implemented in training institutions without additional personnel or capital equipment.
- . The VOITS significantly increases the number of trainees who obtain and maintain jobs upon completion of their vocational training.
- . The benefit cost analysis yields a benefit after only six months of operation which is greater than 17 times the cost of implementation for two years. The anticipated benefits for the next 18 months would further contribute to the impressive benefit cost ratio.

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